Anaerobic Digestion Initiative CalRecycle June 2011

Under its Strategic Directive 6.1, CalRecycle seeks to reduce by 50 percent the amount of organic waste disposed in the state's landfills by 2020. In addition to helping conserve limited landfill capacity, this CalRecycle policy recognizes that organic wastes are a resource, not just solid wastes that must be disposed. Organic wastes have an energy value that can be captured and utilized and are also a necessary component of compost, soil amendments, and other useful products. Directive 6.1 also encompasses one of CalRecycle's actions to help California significantly reduce its generation of greenhouse gases that contribute to global warming. Under the State's "Climate Change Scoping Plan, a Framework for Change" (California Air Resources Board, December 2008), CalRecycle is responsible for taking actions to reduce the emission of methane, a potent greenhouse gas, from landfills. Anaerobic digestion facilities utilize organic wastes as a feedstock from which to produce biogas (which is captured), and the methane in the biogas is converted to other forms of energy, such as liquid natural gas and compressed natural gas. The development of such facilities is one of CalRecycle's charges under the AB 32 Climate Change Scoping Plan. The plan anticipates that anaerobic digestion facilities can reduce landfill methane emissions by 2 million metric tons of equivalent gases per year by the year 2020. Anaerobic digestion also can contribute to meeting the State's Renewable Portfolio Standard and Low Carbon Fuel Standard. To assist in achieving those objectives, CalRecycle intends to adopt the Anaerobic Digestion Initiative, a comprehensive program to foster the development of anaerobic digestion facilities which convert organic solid wastes into sources of energy and can produce valuable compost feedstocks, soil amendments, and other products.

The Anaerobic Digestion Initiative consists of CalRecycle's adoption of a policy and a series of discrete actions to implement the policy, together with additional actions that will be developed and implemented in the future:

- It is the policy of CalRecycle to encourage the development of anaerobic digestion
 facilities in California as an alternative to the landfill disposal of organic solid waste.
 Specifically, as an initial measure, CalRecycle will encourage the establishment of invessel digesters located at existing or new solid waste facilities and in areas zoned for industrial or solid waste handling activities.
- CalRecycle shall, not later than January 1, 2012, establish programs to implement the above policy, including without limitation:
 - Provide research grants, loans, and contracts (dependent on funding availability)
 to develop anaerobic digestion facilities and for activities that advance the state of knowledge about anaerobic digestion and its applications and the uses of products

- and by-products, including anaerobic digestion demonstration projects that use the organic fraction of municipal solid waste as a feedstock
- Develop guidance publications to assist operators who seek to establish anaerobic digestion facilities
- o Develop guidance publications to assist LEAs and other local and regional government agencies that permit and regulate anaerobic digestion facilities, specifically guidance for co-location at solid waste facilities.
- Draft revised regulations for aspects of specific design, operation and permitting of anaerobic digestion facilities within the authority and responsibility of CalRecycle
- O Promote anaerobic digestion through CalRecycle's participation with the California Energy Commission in implementing AB 118 (Alternative and Renewable Fuel and Vehicle Technology Program), the Bioenergy Interagency Working Group, and with the Air Resources Board in implementing the Anaerobic Digestion and Low Carbon Fuel Standard measures in the AB 32 Climate Change Scoping Plan.
- Work with the California Pollution Control Financing Authority and California Alternative Energy and Advanced Transportation Financing Authority to help anaerobic digestion project proposals obtain funding
- Participate on technical workgroups convened by the Climate Action Reserve to develop or modify protocols, such as the Organic Waste Digestion Project Protocol, for projects that divert and anaerobically digest organic waste that otherwise would have gone to solid waste landfills